LineUp With Math™ Alignment
Kansas Curricular Standards for Mathematics
Jan 31, 2004

Standard 2: Algebra

Algebra – The student uses algebraic concepts and procedures in a variety of situations.

Benchmark 4: Models – The student develops and uses mathematical models including the use of concrete objects to represent and explain mathematical relationships in a variety of situations.

Fifth Grade Application Indicators The student…	***LineUp With Math*™ Activities**
1. recognizes that various mathematical models can be used to represent the same problem situation. Mathematical models include: a. process models (concrete objects, pictures, diagrams, number lines, hundred charts, measurement tools, multiplication arrays, division sets, or coordinate planes/grids) to model computational procedures and mathematical relationships and to solve equations; f. function tables (input/output machines, T-tables) to model numerical and algebraic relationships; k. graphs using concrete objects, pictographs, frequency tables, bar graphs, line graphs, circle graphs, Venn diagrams, line plots, charts, tables, and single stem-and-leaf plots to organize and display data (4.1.K2, 4.2.K1-2)	--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

Standard 3: Geometry

Geometry – The student uses geometric concepts and procedures in a variety of situations.

Benchmark 2: Measurement and Estimation – The student estimates, measures, and uses measurement formulas in a variety of situations.

Fifth Grade Knowledge Base Indicators The student…	***LineUp With Math*™ Activities**
1. determines and uses whole number approximations (estimations) for length, width, weight, volume, temperature, time, perimeter, and area using standard and nonstandard units of measure (2.4.K1a)	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

2. selects, explains the selection of, and uses measurement tools, units of measure, and degree of accuracy appropriate for a given situation to measure length, width, weight, volume, temperature, time, perimeter, and area using (2.4.K1a) d. time including elapsed time.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
Fifth Grade Application Indicators The student… 1. solves real-world problems by applying appropriate measurements and measurement formulas: a. length to the nearest eighth of an inch or to the nearest centimeter (2.4.A1a) d. time including elapsed time	***LineUp With Math™* Activities** --Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
3. estimates to check whether or not measurements or calculations for length, weight, temperature, time, perimeter, and area in real-world problems are reasonable	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
4. adjusts original measurement or estimation for length, width, weight, volume, temperature, time, and perimeter in real-world problems based on additional information (a frame of reference)	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.